Q217

National Group:	**Korean Group**
Title:	**The patentability criteria for inventive step / non-obviousness**
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I. Analysis of current law and case law

Level of inventive step / non-obviousness

Q1. What is the standard for inventive step/non-obviousness in your jurisdiction? How is it defined?

A1. The inventive step/non-obviousness of an invention is acknowledged, if difficulty of a person skilled in the art to arrive at the invention from the prior arts at the time of filing is admitted, based on comparison with the prior arts searched from the field to which the invention pertains. The prior arts consist of one or two or more inventions which are publicly known/worked within/without the Republic of Korea, or periodicals distributed within/without Korea, or inventions publicly known via electronic communication wires prior to filing.

Q2. Has the standard changed in the last 20 years? Has the standard evolved with the technical / industrial evolution of your jurisdiction?

A2. Effective as of October 1, 2006, the Republic of Korea adopted internationalism to the standard of determining citable prior arts. Accordingly, not only the inventions publicly known/worked inside the country, the inventions publicly known/worked outside Korea, such as periodicals distributed abroad, etc., are admitted as the citable prior art references to determine inventive step/non-obviousness for the inventions filed on or after October 1, 2006.

Q3. Does your patent-granting authority publish examination guidelines on inventive

step / non-obviousness? If yes, how useful and effective are the guidelines?
A3. The Korean Intellectual Property Office (KIPO) provides guidelines for patent examination, and this includes guidelines on inventive step/non-obviousness. The guidelines on inventive step/non-obviousness describe common theories added with particular remarks to help the examiners determine inventive step/non-obviousness. The examiners at the KIPO examine the inventive step/non-obviousness largely based on the common theories and also depending on particulars of each specific case.

Q4. Does the standard for inventive step / non-obviousness differ during examination versus during litigation or invalidity proceedings?
A4. No. That is, the standard for inventive step / non-obviousness here in Korea does not differ during examination versus during litigation or invalidity proceedings.

Construction of claims and interpretation of prior art
Q5. How are the claims construed in your jurisdiction? Are they read literally, or as would be understood by a person skilled in the art?
A5. Given the fact that the patent law prescribes the level of describing the detailed description of the invention to meet a person skilled in the art to which the invention pertains, it is reasonable to understand that the claims are interpreted based on the standard of a person skilled in the art.

Q6. Is it possible to read embodiments from the body of the specification into the claims?
A6. In principle, the inventions are specified as these are written in the claims, provided that the claims are written clearly. If the claims contain terms or descriptions which convey unclear meaning/content, the inventions may be interpreted with reference to the detailed description or the drawings.

Q7. How is the prior art interpreted? Is it read literally or interpreted as would be understood by a person skilled in the art? Is reliance on inherent disclosures (aspects of the prior art that are not explicitly mentioned but would be understood to

be present by a person skilled in the art) permitted?
A7. Considering the fact that the standard for determining inventive step/non-obviousness is based on a person skilled in the art, the prior arts are interpreted based on the person skilled in the art. Accordingly, it is reasonable to understand that not only the disclosures explicitly mentioned in the prior art, but those that are inherently implied are also included in the prior art.

Q8. Do the answers to any of the questions above differ during examination versus during litigation?
A8. The above-mentioned issues invariably apply during examination and during litigation.

Combination or modification of prior art

Q9. Is it proper in your jurisdiction to find lack of inventive step or obviousness over a single prior art reference? If yes, and assuming the claim is novel over the prior art reference, what is required to provide the missing teaching(s)? Is argument sufficient? Is the level of the common general knowledge an issue to be considered?
A9. It is legal to deny inventive step/non-obviousness based on one single prior art, and provided that the invention possesses novelty, the inventive step/non-obviousness can be denied on grounds that the elements missing in the prior art are already known and used.

Q10. What is required to combine two or more prior art references? Is an explicit teaching or motivation to combine required?
A10. It is possible to combine two or more prior art references, only when such is obvious to a person skilled in the art. However, no duty is imposed to specifically mention the combination of two or more prior art references.

Q11. When two or more prior art references are combined, how relevant is the closeness of the technical field to what is being claimed? How relevant is the problem the inventor of the claim in question was trying to solve?

A11. To cite prior art references from different field(s), it is necessary to consider comprehensively the relevancy of the invention fields, sameness of the problems solved, sameness of the functions, etc.

Q12. Is it permitted in your jurisdiction to combine more than two references to show lack of inventive step or obviousness? Is the standard different from when only two references are combined?
A12. Three or more prior art references may be combined to deny the inventive step/non-obviousness, and herein, equal standard applies between when three or more references are combined and when only two references are combined.

Q13. Do the answers to any of the questions above differ during examination versus during litigation?
A13. No. There is no difference applied during examination versus during litigation.

Technical Problem

Q14. What role, if any, does the technical problem to be solved play in determining inventive step or non-obviousness?
A14. The object of the invention, that is, the problem to be solved by the invention is one of the factors considered when determining inventive step/non-obviousness. The object is deemed to be distinct, if the invention has the technical object in relation to the explanation of unknown causes of the problems inherent with the prior art in the technical field where the invention pertains, or to exploration of new technical field.

Q15. To what degree, if any, must the technical problem be disclosed or identified in the specification?
A15. One needs to describe the problems inherent with the prior art which is considered to be the object of the invention for which patent protection is sought after.

Advantageous effects

Q16. What role, if any, do advantageous effects play in determining inventive step or non-obviousness?

A16. The advantageous effects play important role in acknowledgment of the inventive step/non-obviousness, if the invention provides the effects derived from the constitution of the invention which are distinct from the known inventions by quality, or considerable increase by quantity compared to the known inventions based on the level of technology available at the time of filing.

Q17. Must the advantageous effects be disclosed in the as-filed specification?

A17. In principle, the advantageous effects have to be disclosed in the as-filed specification, but even the invention lacking the disclosure of the advantageous effects may be considered to have inventive step/non-obviousness if such is inferable for a person skilled in the art.

Q18. Is it possible to have later-submitted data considered by the Examiner?

A18. In principle, later-submitted data cannot be added to the specification. However, examiner may consider this when determining patentability in the examination stage.

Q19. How “real” must the advantageous effects be? Are paper or hypothetical examples sufficient?

A19. Expected or hypothetical effects can be acknowledged.

Q20. Do the answers to any of the questions above differ during examination versus during litigation?

A20. The above matters apply equally both during examination versus during litigation.

Teaching away

Q21. Does your jurisdiction recognize teaching away as a factor in favor of inventive

step / non-obviousness? Must the teaching be explicit?
A21. The prior art cannot be used as a basis to deny the inventive step/non-obviousness of the invention, if the prior art includes disclosures that are unsuitable to constitute a motivation to arrive at the invention of the examined claims, and such teaching need not be explicitly mentioned in the specification.

Q22. Among the other factors supporting inventive step / non-obviousness, how important is teaching away?
A22. The importance of teaching away varies in degrees based on the degree of explicitness and also depending on each specific case.

Q23. Is there any difference in how teaching away is applied during examination versus in litigation?
A23. The above matters apply equally both during examination versus during litigation.

Secondary considerations

Q24. Are secondary considerations recognized in your jurisdiction?
A24. The secondary considerations, such as commercial success or resolution of long-standing problems, are recognized during the evaluation of inventive step/non-obviousness.

Q25. If yes, what are the accepted secondary considerations? How and to what degree must they be proven? Is a close connection between the claimed invention and the secondary considerations required?
A25. The accepted secondary considerations include occurrence of imitations following commercial success, resolution of long-standing problems, overcoming of technical bias, or resolution of technical difficulties.

Q26. Do the answers to any of the questions above differ during examination versus during litigation?

A26. The above apply equally both during examination versus during litigation.

Other considerations

Q27. In addition to the subjects discussed in questions 4 – 26 above, are there other issues, tests, or factors that are taken into consideration in determining inventive step / non-obviousness in your jurisdiction?

A27. About qualification of a citable prior art reference for comparing inventive step/non-obviousness, even the inventions admitted by the applicant to have been published prior to filing, or incomplete inventions can be acknowledged as the citable prior art references if these have high degree of invention. Additionally, since the inventions described in the claims of the filed invention have to be considered comprehensively according to the All Elements Rule, inventive step/non-obviousness of the entire claims cannot be denied simply on grounds that the filed invention is already known or obvious, and even for those inventions for which solutions to the problems are considered to be easy when the causes of the problems are explained, inventive step/non-obviousness is still considered by putting importance on the process of explaining the causes of the problems.

Test

Q28. What is the specific statement of the test for inventive step/non-obviousness in your jurisdiction? Is there jurisprudence or other authoritative literature interpreting the meaning of such test and, if so, provide a brief summary of such interpretation.

A28. A few precedent cases involved consideration of inventive step/non-obviousness for rather special cases such as selection invention or invention defined by numerical limitation.

Q29. Does such test differ during examination versus during litigation?

A29. The above apply equally both during examination versus during litigation.

Patent granting authorities versus courts

Q30. If there are areas not already described above where the approach to inventive step / non-obviousness taken during examination diverges from that taken by courts, please describe these areas.
A30. There is no area where the approach to inventive step / non-obviousness taken during examination diverges from that taken by courts.

Q31. Is divergence in approach to inventive step / non-obviousness between the courts and the patent granting authority in your jurisdiction problematic?
A31. No.

Regional and national patent granting authorities

Q32. If you have two patent granting authorities covering your jurisdiction, do they diverge in their approach to inventive step / non-obviousness?
A32. The patent granting authorities largely do not diverge in their approach to inventive step / non-obviousness, although results of inventive step/non-obviousness examination could vary depending on specific criteria applied.

Q33. If yes, is this problematic?
A33. This can be problematic, since different examination result can be issued for the same invention based on the same prior art references, due to the standard variably applied by the patent grating authorities in their own way.

II. Proposals for harmonization

Q34. Is harmonization of inventive step / non-obviousness desirable?
A34. It will be desirable to have harmonization of inventive step / non-obviousness.

Q35. Is it possible to find a standard for inventive step / non-obviousness that would be universally acceptable?
A35. It will be a challenging work to provide a unified standard for inventive step /

non-obviousness that would be universally acceptable, considering unique legal systems in each country and also the level of technologies varying in each country.

Q36. Please propose a definition for inventive step / non-obviousness that you would consider to be broadly acceptable.
A36. In my opinion, inventive step / non-obviousness is the state at which the invention provides the effects that cannot be expected from the prior art existed prior to the filing of the invention to the extent of contributing to the advancement of the national industry.

Q37. Please propose an approach to the application of this definition that could be used by examiners and by courts in determining inventive step / non-obviousness.
A37. I propose that the examiners and courts determine inventive step/non-obviousness more based on the industrial success, economic stimulation, etc., while maintaining the framework based on the fundamental standards.

Summary

In republic of Korea, one or two or more of the prior art inventions, from among the inventions publicly known/worked inside/outside Korea, inventions published in periodicals distributed inside/outside Korea, or inventions published via electronic communication wires, are compared to determine inventive step/non-obviousness of an invention. That is, inventive step/non-obviousness of the filed invention is acknowledged only when a person skilled in the art is not able to easily arrive at the invention based on the above-mentioned prior arts at the time of filing.

Claims under examination are interpreted based on the scope of claims and at a level corresponding to that of a person skilled in the art. Reference to the detailed description or drawings in interpreting the claims is exceptional. The prior arts are interpreted also at a level corresponding to that of a person skilled in the art, based on not only the disclosure specifically mentioned in the specification, but also inherently-implied disclosure.

It is legal to deny inventive step/non-obviousness of the invention based on one single prior art, and also possible to do so based on a combination of two or more prior arts. Acceptability to cite the prior arts from a field distinct from that of the filed invention is determined based on comprehensive consideration of the sameness of the technical field, problems to be solved, or the like.

Distinctiveness of the problems to be solved is taken into consideration when evaluating inventive step/non-obviousness of a filed invention.

Advantageous effects derived from the constitution of a filed invention are also taken into consideration when determining inventive step/non-obviousness. Even the invention lacking specific mentioning of the effects in the specification can be considered as having inventive step/non-obviousness if such is in the inferrable range to a person skilled in the art. Data related to the advantageous effects that are submitted later after filing can be considered by the examiner during examination stage.

In case of teaching away, inventive step/non-obviousness of a filed invention cannot be denied by the corresponding prior art, and it is not required to specifically describe the corresponding disclosure.

Secondary considerations such as commercial success, resolution of long-standing problems, etc., are also taken into consideration in evaluating inventive step/non-obviousness. Regarding acceptability of the prior invention as a citable prior art, technologies admitted by the application as the inventions having been disclosed prior to filing, or incomplete inventions but with high degree of invention, can also be accepted as the citable prior arts. Further, hindsight bias is abstained when evaluating inventive step/non-obviousness. Accordingly, even when a solution to a certain problem is considered to be easier than expected, much importance is placed on the process of finding such solution instead of disregarding it for easiness thereof.

Examination process for evaluating inventive step/non-obviousness does not differ during examination versus during litigation or invalidity proceeding.

It will be desirable to have harmonization of inventive step/non-obviousness. However, considering the fact that each jurisdiction has its own legal system and varying degrees of technological developments, such harmonization is considered to be practically difficult.